

The Experience of Conditional Cash Transfers in Latin America and the Caribbean

*Sudhanshu Handa and Benjamin Davis**

This article discusses the experience of six conditional cash transfer programmes in Latin America, a model of social safety-nets which has grown to dominate the social protection sector in the region during the past decade. While they have been generally successful in terms of achieving their core objective, it is still not clear whether these programmes constitute the most cost-efficient or sustainable solution to the development bottleneck they seek to address. Furthermore, the almost exclusive focus on the human capital accumulation of children leads to missed opportunities in terms of impact on household welfare and the broader rural development context.

1 Introduction

This article discusses conditional cash transfer programmes (CCTs) in Latin America and the Caribbean (LAC). These programmes link safety-nets directly to human-capital development, by making receipt of the transfer conditional on school attendance and health-care checkups. In most cases, CCTs are provided directly to mothers on the assumption that they are more likely to use the resources to benefit their children.

CCT programmes have come to dominate the social protection sector in Latin America and the Caribbean over the last ten years; at this point virtually all countries in the region are either implementing such a programme or are in various stages of discussion on the relative merits of implementing programmes of this type. Furthermore, CCTs are increasingly being promoted as best practice in the social sector for developing countries in other parts of the world, and have spurred debates over the relative merit of cash- versus food-based transfers. Finally, the fiscal and policy weight given to these programmes has had a significant impact on the composition and funding of rural development policy in general.

The popularity of these programmes can be attributed to the success of the *Bolsa Escola* (in 2003 merged into *Bolsa Familia*) and *Progresá* (in 2001 renamed *Oportunidades*) programmes in Brazil and Mexico respectively in the late 1990s. It also reflects the subsequent overwhelming support from the Inter-American Development Bank (IDB) and the World Bank to financing such activities as human-capital investment loans alongside the physical investment that typically dominates the

* Respectively, Associate Professor at the Department of Public Policy, University of North Carolina, and Economist with the Food and Agriculture Organisation, Viale delle Terme di Caracalla, 00100 Rome (benjamin.davis@fao.org). They wish to thank Carol Watson-Williams, Carola Alvarez, Amanda Glassman, David Coady, John Maluccio, Marcelo Cabrol, Ferdinando Regalia and Silvia Raw for useful discussion and comments on an earlier draft.

portfolio of these lending agencies. In 2001 the IDB approved the largest loan in its history to support the expansion of Mexico's *Oportunidades* programme into urban areas.

The discussion is based primarily on a comparison of six CCT programmes currently being implemented in the region. Besides *Oportunidades* and *Bolsa Familia*, these include the *Programa de Asignación Familiar II* (PRAF II) in Honduras, *Red de Protección Social* (RPS) in Nicaragua, Programme for Advancement Through Health and Education (PATH) in Jamaica, and *Familias en Acción* in Colombia.

Keeping in mind that the specifics – and success – of any programme will depend on national objectives, institutional capacity and financing constraints, the discussion here revolves around three key topics: programme origins and objectives; programme parameters and targeting; and monitoring and evaluation strategies and results. We do not review the programmes in detail,¹ instead, we contrast design choices across them and comment on their appropriateness and their operational success or weaknesses, and draw out implications for the implementation of future social safety-nets within the context of rural development.

2 Origins and objectives

2.1 Origins

Table 1 provides information on the size, origins, and coverage of the CCTs currently in operation in the region as well as on country GDP and poverty. The CCT programmes under discussion vary greatly in terms of scale of operation. Brazil and Mexico have by far the largest programmes, reaching approximately 8 million and 5 million households respectively, with budgets of over US\$2 billion a year. Nicaragua has the smallest programme, reaching about 21,000 families with a budget of about US\$6 million a year.

Most CCTs have the same dual objectives, combining long-run human-capital development with short-term poverty alleviation, but their origins are different. In only two cases (*Progresal/Oportunidades* and *Bolsa Escola*, the predecessor of *Bolsa Familia*) can they be considered indigenous, in the sense that they were initially designed and financed without the help of the development banks. However, in both these cases subsequent expansion was financed through loans. *Progresal* represented a fundamental shift from universal food subsidies to targeted transfers, while *Bolsa Familia* brought together a number of separate CCT programmes, the origins of which derive from state-level initiatives.

In Jamaica, Honduras and Nicaragua the introduction of CCTs is clearly linked to external financing and forms part of a broader objective to consolidate the social safety-net and strengthen its administrative and implementation capacity. Colombia's programme was partially in response to the country's economic crisis. The IDB/WB loan that financed *Familias en Acción* also sought to establish a coherent safety-net to replace a fragmented array of existing programmes.

1. See Ilahi et al. (2000), Rawlings (2004) and Rawlings (2005) for more general discussions of CCT programmes in Latin America.

Table 1: Basic information on programmes and countries

	GDP per capita (\$)	Poverty headcount	Budget/coverage	Origin
Brazil – <i>Bolsa Familia</i>	2,700	35 (2004)	\$2.1 bn 8 million households (2004)	Merger of several federal and state programmes (<i>Bolsa Escola, Bolsa Alimentação, Auxilio Gas and Cartão Alimentacao</i>) into one in 2004. Merger and strengthening financed by IDB and World Bank investment loans.
Colombia – <i>Familias en Acción</i>	2,100	55	\$125 m. 400,000 families (2004)	IDB loan, 2000; part of broader safety-net reform and consolidation.
Honduras – PRAF II	800	64 (2004)	\$25 m. 411,000 families (2005)	PRAF was established in 1991 and distributed cash coupons as an income supplement to improve food security. An initial IDB loan supported coupons and the Social Fund; CCTs (PRAF II) were introduced in 1998 as part of a sector-wide modernisation and strengthening initiative financed by IDB loan; IDB follow-on loan approved in 2004.
Jamaica – PATH	1,600	18 (2001)	\$16 m. 220,000 individuals (2005)	Part of wider sector reform and consolidation of cash transfer programmes and food stamps. Financed by IDB sector loan and World Bank investment loan in 2001.
Mexico – <i>Progresal/Oportunidades</i>	6,500	32 (2000)	\$2.8 bn 5 million households (3.5 million rural) (2004)	Federal government stand-alone programme began in 1997, coinciding with removal of some general food subsidies; IDB financed urban expansion in 2002.
Nicaragua – RPS	500	46 (2001)	\$6.37 m. 21,619 families (2004)	IDB multi-phase loan, 2000; part of comprehensive social safety-net for poverty reduction. Initially executed by FISE, later moved to Ministry of the Family. IDB second phase approved in 2002.

2.2 *Is there a development bottleneck?*

A key question is the extent to which the education and health components of CCT programmes respond to a fundamental development bottleneck, particularly in the poorer countries such as Nicaragua, Honduras and Colombia where administrative capacity and financing are low and poverty widespread. In these three countries primary school net enrolment rates hover around 85% and are lower for poor families and in rural areas. The demand-side subsidy has proved unable to bring all the remaining 10-15% of this age group into school, since these are the most marginalised and are unlikely even to have access to a school. A demand-side transfer is more likely to make a difference to attendance (and hence achievement) as well as age of entry. In these and other countries (Brazil, Mexico) delayed entry is a widespread phenomenon among the poor and in rural areas. One exception is Jamaica where basic schooling is universal across the country (although the quality of service does vary by region). However, school attendance (as opposed to enrolment) in rural areas is inconsistent and linked to economic factors. In this case the argument for a CCT would be to address the attendance problem in rural areas and in urban ghettos.

With regard to basic health, the same general pattern of inequalities in child nutritional status, pre-natal care and preventive health check-ups exists as in primary education. The poor and rural families are less likely to use the health services and have poorer birth and child nutritional outcomes. In theory therefore, a development bottleneck existed in these countries and the programmes sought to address it.

2.3 *Is this development bottleneck demand- or supply-driven?*

When thinking about the applicability of a CCT, however, the key question is whether observed inequities in health and education are due to demand-side (income, preferences) or supply-side constraints. Could an adequate universal supply of quality primary health and education erase the observed disparities in the region? We have found no *ex ante* analysis that directly tests the proposition that inequities in schooling and health are primarily due to demand-side factors relative to supply-side ones. The common observation that poor children attend school and health check-ups less frequently is *not* sufficient evidence to conclude that a demand-side intervention will solve the problem. Income is highly correlated with access to and quality of schooling and health care, making it just as plausible that differences in outcomes are driven by the unequal distribution of access and quality of services. Even if both supply- and demand-side factors are shown to be important, the question remains as to which is the more cost-effective option for the government to pursue.

On the schooling front there is substantial research that attempts to estimate the impact of school access and quality on various schooling outcomes.² From an economic point of view, the observed high rates of return to even basic schooling do not square with the need to provide monetary incentives for families in rural areas to send their children to school. An explanation for this apparently contradictory phenomenon is the

2. See Hanushek (1995) and Kremer (1995) for an interesting discussion of the role of school quality on student achievement in developing countries.

importance of school quality, which is typically unobserved (and hence not controlled for) in rate of return studies (Behrman and Birdsall, 1983). Given the existing distribution of school quality in LAC, the implication is that if school quality (including access) were improved significantly the poor would take advantage of educational opportunities without the assistance of direct monetary transfers. Indeed, Bedi and Marshall (2002) show that perceived school quality does significantly increase enrolment in rural Honduras. Of course, even public schooling does involve some direct out-of-pocket costs which poor credit-constrained families may not be able to afford. Again, the relative importance of these direct costs versus the (low) expected future benefits due to low-quality schooling is not known. On efficiency grounds, the existence of very large direct costs of schooling would seem to be the primary justification for CCT-type programmes.

Two recent studies have tried to estimate directly the relative cost-effectiveness of supply- versus demand-side interventions in improving school enrolment in developing countries. Coady and Parker (2004a) find that with *Progresa* demand-side interventions are more cost-effective. The study, however, is hampered by little change in supply-side variables, thus possibly leading to an underestimation of the impact of supply-side factors. A second study (Handa, 2002) is based on data from Mozambique which has poverty rates comparable to Honduras and Nicaragua but much lower primary school enrolment rates and less school infrastructure. It finds that demand-side intervention is the least cost-effective. While this result may not necessarily be relevant to Latin America, the study points to questions about the cost-effectiveness of supply- versus demand-side interventions which have not yet been rigorously studied in the region.

The arguments regarding supply- versus demand-side factors influencing health-care utilisation are similar up to a point. The key difference between schooling and health utilisation is the issue of information and knowledge regarding returns to investment, as well as cultural attitudes towards modern medical care. For health care there are two types of problems: lack of knowledge concerning the economic returns to health-care check-ups, pre-natal care treatment and other types of preventative health care, and information asymmetry – the providers of health care have much greater knowledge of options and their likely costs and benefits than do the users. These problems are further compounded by fear of, and hesitation about, modern health practices that are not easily understood. For these reasons, the market failure as regards basic primary health care may be significantly greater than it is for schooling, thus implying a greater need for intervention on efficiency grounds. The demand for quality health care is difficult to model, because it is hard to measure (and control for) the exogenous price of different alternatives, but there is evidence that both quality and access are important determinants of utilisation.³

2.4 Is the focus of CCTs too narrow?

A common criticism of CCT programmes is the almost exclusive focus on human-capital accumulation for children, which takes years – sometimes a generation – to

3. See Akin et al. (1985) for a discussion of the issues and an example; Jensen and Stewart (2000) report that service quality is an important determinant of utilisation in the Philippines.

develop. These programmes tend to ignore building human capital or productive capacity for adults who are past school age, and the accumulation of productive capital for the here and now: that is, capital, such as land or non-agricultural assets, which would have both long- and short-term effects on poverty alleviation. Through CCTs children will be better prepared for the labour market when they are older, but productive investment of the transfer would allow the family to sustain the impact of the cash transfers, which cannot continue indefinitely.⁴

While it is not clear whether human capital goals and productive capital accumulation goals should co-exist within the same programme, the design could benefit from considering what role cash transfers can play in this regard. Indeed, the results from research (Davis et al., 2002; Gertler et al., 2005) show that even the extreme poor in receipt of *Progresa* transfers spend some part of their transfer on productive activities. On the other hand, results from Davis et al. (2005) suggest that a higher shadow price of time among agricultural households facing credit and/or labour market imperfections blunts the impact of the *Progresa* programme. There would therefore be some merit in considering how to maximise the indirect productive effect of CCT programmes, and minimise constraints, when designing the programme. At a broader level, CCT programmes in rural areas constitute a substantial infusion of liquidity among poor households and their communities. The poverty-alleviation and development impact could be maximised by better considering the local economic context in which households and their communities operate.

2.5 Reducing poverty now

Another important objective of CCT programmes is reducing the incidence and depth of poverty. The theoretical impetus for the design of these programmes is long-term reduction in poverty, but, primarily for political reasons, reductions in the current or short-term incidence of poverty are frequently stated as policy objectives. While it is relatively easy to find increases in beneficiary welfare, actually linking changes in the national incidence of poverty with expenditures on CCT programmes is difficult, as many other factors – particularly economic growth – play a determinant role. An economic downturn can obscure any improvements in the overall incidence of poverty, even though beneficiaries of the programme are better-off than if they had not received the programme. Furthermore, as we shall see in the discussion of the different components of programme parameters in the next section, the twin objectives of long-term reduction in structural poverty and reduction in the current incidence of poverty lead to contradictions in programme design.

2.6 A safety-net in times of crisis

One possible justification for CCT programmes is their potential role as short-term safety-nets during times of crisis. One feature of recessions is that the poor become poorer, thus increasing their poverty gap. Since these are families that already qualify

4. For a general discussion of social protection and household economic activities, see Farrington et al. (2004).

for the CCT, the response here is a relatively straightforward short-term increase in the size of the benefits.⁵

Another feature of short-term recessions is that a sizeable number of ‘near poor’ or lower-middle-class families drop into poverty. These are families that would not otherwise be eligible for a CCT. CCT programmes, as currently implemented, are less capable of serving the needs of the transitional poor. Most household-level targeting mechanisms measure structural poverty via long-term indicators of well-being and are not suited for measuring transitional poverty. Furthermore, the information-gathering systems of most CCTs are not designed to incorporate new beneficiaries at short notice, or to drop households that have moved out of poverty, for that matter.

Even CCT programmes designed to address structural poverty can play a role in terms of mitigating the effects of a crisis. Davis et al. (2004) simulate the headcount and poverty gap in Mexico in 1996 (during the tequila crisis) had *Progresa* been operating at that time, and find that these indicators would have been 17% and 23% lower respectively. Maluccio (2005), using the *Red de Protección Social* evaluation data in Nicaragua, shows that, while both treatment and control households suffered negative welfare shocks from the coffee crisis, the decline was smaller among treatment households, and that the RPS played an important part in the coping strategies of directly affected households. Finally, de Janvry et al. (2006) find that the *Progresa* programme protected children from leaving school in the event of a shock, though it was unable to prevent them from doing more work.

3 Programme parameters

3.1 Benefit size and structure

The benefit structure is a particularly complex aspect of CCTs relative to other safety-net programmes because it tends to vary with the characteristics of the beneficiary family and usually involves more than one component. Table 2 summarises the structure and level of benefits in the sample of programmes in US dollars at prevailing exchange rates, as well as in terms relative either to the poverty line or to the average income or consumption of beneficiary households.⁶ An international rule of thumb is that a poverty-motivated cash or in-kind transfer should represent between 20% and 40% of the per capita total poverty line in order to be meaningful to the beneficiary. This standard is generally met at the low end by all programmes, except for Brazil and Honduras where the fractions are significantly lower than 20%.

Most benefit structures have a family-level cap and consist of a fixed family-level transfer which is conditional on health check-ups, plus an educational transfer which is given on a per-child basis conditional on school enrolment and minimum attendance.

5. A response on the monitoring side might also be considered, given the risk of poor families pulling children out of school to meet short-term economic needs.

6. These latter calculations require knowledge of the average transfer to beneficiaries, a figure which is not available in all cases. When not available, we use an average family size of 2 adults and 2.5 children and assume that each child receives the average child subsidy if there is variation in this subsidy by sex or age.

Table 2: Benefits

	Monthly monetary benefit (US\$)	Average monthly transfer (US\$)	Average transfer as % poverty line	% of household consumption
Brazil – <i>Bolsa Escola</i>	\$6-9 per child			
Brazil – <i>Bolsa Familia</i>	\$18 per extremely poor family; \$5 per child up to 3 children	\$24	12 (IPEA poverty line)	
Colombia – <i>Familias en Acción</i>	\$20 per family; \$6 per child primary; \$12 per child secondary	\$50		30
Honduras – PRAF II	\$4 per family; \$5 per child	\$17	8	10
Jamaica – PATH	\$9 per eligible household member (child, elderly, disabled)	\$45	16	20
Mexico – <i>Progresal/Oportunidades</i>	\$13 per family; \$8-17 per child primary; \$25-32 per child secondary; one-time grant \$12-22 per child for supplies	\$20	23	25
Nicaragua – RPS	\$18 per family; additional \$9 per family with a school-age child; \$20 once a year per child for mochila	\$25	18	20

The exception is PATH, where the transfer is strictly an individual one; each eligible individual⁷ in an eligible family is given the benefit and there is no family cap. One implication of the PATH structure is that benefits can be lost for non-compliance with any of the health or schooling conditions, while in other programmes families can comply with health and not schooling. In both cases families can specialise by sending some children to school and not others, and still collect the per-child subsidy for the child in school.

Several different approaches can be used to set the theoretical level of transfers. The simplest method is to work backwards: calculate 20-40% of the poverty line on a per-person basis which will represent the minimum or target total level of transfer to be delivered to the typical beneficiary family. A two-part transfer requires an additional calculation since the total (targeted) transfer must be partitioned into a flat transfer per family plus a per-child component. In some cases the per-child benefit has been set with reference to the opportunity cost of child schooling, as in Honduras and Mexico.⁸

7. Unlike other programmes, PATH includes specific target groups such as the elderly and handicapped.

8. See Coady (2001) for a study of the distributional impacts of the two-part transfer in Mexico.

Another approach is to consider the depth of poverty when designing the transfer level. The *Bolsa Familia* flat transfer is set at half the minimum wage per person (although only one transfer per family is permitted, so that effectively the transfer is one-eighth of the minimum wage for a family of 4). This is only given to families farthest below the poverty line (the extreme poor); the moderate poor are not given a flat subsidy but are eligible to receive the per-child subsidy conditional on school enrolment and attendance.

The flat per-family subsidy has typically been linked to the low-cost food basket, with the objective of providing enough money for poor families to purchase adequate nutrition. In both Mexico and Colombia the family benefit is linked to the average gap between the income of the poor and the cost of the basic-needs food basket. In PRAF II, on the other hand, the subsidy is strictly related to the opportunity cost of fulfilling the health and other programme-related requirements to earn the subsidy. In Jamaica the per-person subsidy was calculated with reference to the poverty line and the average expected number of beneficiaries per eligible family. While most programmes require some health-related condition to qualify for the family subsidy, in no case does the subsidy level itself seem to take into consideration the time cost of compliance, which can be substantial. On the other hand, the PRAF II experience demonstrates that both factors should be considered and not just the time cost, since this may end up being too low to induce participation.

A separate but related issue is the overall benefit cap that is typically imposed on participant families. One theoretical rationale for capping is economies of scale in household consumption, but this is not consistent with the per-child subsidy which is presumably linked to the opportunity cost of attending school. The existence of the cap may then be linked to the desire to spread programme benefits over as many different families as possible, and/or to avoid fertility-related incentives. Of these two reasons the second is the more compelling, especially in cases where proxy means tests are designed to give families with young children extra points. However, this could lead to perverse incentives, as initially occurred in PRAF.⁹ PATH is the only programme without a cap, while the RPS takes the other extreme, with a limit of US\$9 per month regardless of the number of school-age children in the family, which clearly favours smaller families.

Another dimension along which benefits may vary is the age and sex of school-age children. The most notable examples are in Mexico and Colombia where the per-child subsidy almost doubles between primary and junior secondary school, a stage where drop-out rates increase (or continuation rates decrease) sharply. The opportunity cost of time for these older children may be higher, and direct costs are also reported to be higher, due to increased school supplies and additional transportation costs since the coverage of junior secondary schools is not as widespread as that of primary schools. The transition from primary to junior secondary is arguably the most important transition in the school career of a child from a poor family; this is one of the first moments when the family decides on the future trajectory of the child in terms of work

9. Stecklov et al. (2006) show that this design flaw – later corrected – led to an increase in fertility among PRAF II beneficiary households. They find no impact on fertility from *Progres*a or RPS.

versus school, and for this reason emphasis has been placed on ensuring a successful transition by increasing the school subsidy.¹⁰

Oportunidades also provides a larger subsidy to girls than boys, presumably in response to the higher drop-out rates observed for girls. Yet, while direct costs are the same for boys and girls, opportunity costs may actually be higher for boys, so, if anything, the response on economic efficiency grounds would be to increase the relative subsidy for boys. Behrman et al. (2000) claim that in fact the higher enrolment rates of boys at older ages in Mexico is partly due to the slower progression of boys through the system rather than the early drop-outs of girls, implying that the transfer level should actually favour boys over girls at the junior secondary level. The variation by sex in the benefit structure thus requires additional understanding of the reason for the apparently higher female drop-out rate and whether in fact there are underlying differences in direct or indirect costs that work against females.

3.2 Conditionality

The conditional aspect of CCTs is one of the most attractive features of the programme and also one of the most complicated to execute. The potential administrative burden of monitoring conditionality, particularly in countries with weak institutional structures, leads to the obvious question of whether conditionality is necessary, and if it is, what type of monitoring mechanism is best, given costs and institutional structures and capacity. There is some recent theoretical work on the issue of conditionality,¹¹ but serious empirical analysis that tries to disentangle the income and substitution (or price) effects has yet to be undertaken.

Other aspects of conditionality may incur an additional impact. Hoddinott and Skoufias (2004) analyse the impact of *Progresa* on total calorie availability and find overall large impacts of the programme on calories derived from vegetables and animal products. They find that the impact on food consumption goes beyond a simple income effect and also includes what they call a '*platica*' effect – behavioural change induced by participation in health and nutrition talks.

The question of whether conditionality is necessary for school enrolment has not been established empirically, but it seems unlikely that a simple cash transfer made without even a tacit expectation of school enrolment would induce such behaviour.¹² While schooling is a normal good so that the income effect should in principle induce some human-capital investment behaviour, the overall level of the grant is likely to be too small to make a difference. More importantly, the serious issues of school quality in communities served by these programmes will keep overall net benefits to school investment too low to induce major behavioural change without explicit expectations in this regard.

10. Indeed, some have argued that the school subsidy should only be given at this stage and be large enough to induce the family to let the child finish primary school in order to then take advantage of the subsidy.

11. See, for example, Martinelli and Parker (2003).

12. This observation is consistent with results provided in Davis et al. (2002), who compare the impact of *Progresa* with the *Procampo* programme on school enrolment.

Conditionality may also be considered necessary from a political-economy perspective. Public support for safety-nets in general, and the provision of cash in particular, is a function of the values of society as well as of the characteristics of the poor. Support will be less in countries where citizens feel that poverty is due to individual lack of effort or responsibility, for example,¹³ or when the poor are easily identified as 'different'. In Latin America the 'face' of the poor is typically very different from that of mainstream society, and the poor are often geographically marginalised. CCT programmes respond to this political constraint by requiring the poor to take responsibility for their actions and 'work' for their money.

Given that some form of conditionality (even if only on paper) is likely to be a part of these programmes, an important issue is the cost of monitoring compliance, which will be related to the complexity of the conditions and the degree of monitoring. Caldes et al. (2004) review the cost structure of different activities related to programme execution for *Oportunidades*, RPS and PRAF II. In the first, the most mature of the three programmes, monitoring conditionality represents about 18% of the total programme costs (net of transfers). In RPS and PRAF II these shares are much smaller, mostly because these programmes were still in the design and expansion phase at the time of the study; once the fixed costs related to expansion are excluded, the share devoted to conditionality increases substantially. Moreover, when external impact evaluation costs are excluded (a one-time fixed cost), conditionality becomes an even larger (over 20%) share of activity costs. Clearly conditionality comes at a high price.

If conditionality is primarily viewed as a way of ensuring middle-class support for the poverty budget, then monitoring of compliance can be either eliminated altogether or be done in the least-cost manner. This may be the Brazilian model; *Bolsa Familia* is advertised as a human-capital development programme that emphasises beneficiary responsibility, which provides a degree of political support. Yet actual monitoring of compliance is left to the municipalities and is haphazard at best. On the other hand, monitoring of compliance in *Progresa* was taken to such an extreme that the transfers of all beneficiaries were routinely delayed by several months until compliance was verified for everyone, despite the fact that programme compliance was well over 90% among beneficiaries. Clearly some compromise between these two extremes is the most prudent approach, with the degree of diligence a function of both actual compliance among beneficiaries and the cost of monitoring.

3.3 Exit rules

The dual objectives of short-term poverty alleviation and long-term human-capital development lead to conflicting policy recommendations with respect to exit rules. A programme designed to alleviate short-term poverty would remove beneficiaries if they are no longer poor, or would have strict time limits (as in the US welfare programme) to reduce the risk of dependence. On the other hand, a programme designed to enhance human capital among the poor ought to support families until the human-capital cycle is

13. Graham (2002) reports that the Latinobarometro poll finds that citizens in Latin America are remarkably similar to those in the United States in their attitude towards the perceived causes of poverty, feeling that it has more to do with individual failure than with a lack of opportunity.

complete, for example, through middle school or lower secondary school. Graduation would be automatic, and would coincide with when the child completed the designated cycle.

Almost all CCTs have explicit term limits after which families are reassessed (PRAF, RPS and *Oportunidades* have an initial 3-year eligibility period followed by recertification). This policy is clearly in conflict with the supposed long-term human-capital development objective of CCTs. Of course, any long-term commitment consistent with the human-capital development objective raises serious concerns about financing and sustainability, particularly in the Heavily Indebted Poor Countries. In countries with high poverty rates, supporting 20-30% (or more) of the population for 10 years or more, while children complete middle or lower secondary school, is unlikely. Yet, if human-capital development is the stated objective of CCTs, then it seems logical that families should be supported through the education cycle.

3.4 Targeting

A key feature of CCTs is the emphasis on targeting transfers to the poorest segments of the population. The main CCT targeting methods include proxy means tests, means tests and geographic targeting, often in combination. For example, in Brazil means testing is combined with indicative targeting, where funds are earmarked to states and municipalities based on estimates of the potential beneficiaries derived from the census. In Mexico an initial round of geographical targeting is used in the rural *Progresa* programme before the proxy means test.¹⁴

Geographical targeting is feasible when the poor are geographically concentrated and overall poverty levels are high, as occurs in most rural areas in Latin America. For example, poverty rates among targeted communities in Nicaragua and rural Mexico are around 70%. In these situations the additional cost of individual targeting has been shown to yield little in terms of efficiency,¹⁵ and other ways of discouraging the non-poor from participating should be considered. Moreover, individual targeting in small communities with high poverty rates can lead to social conflict within the community, as is documented in the *Progresa* evaluation reports (Adato et al., 2000). However, a study on RPS (IFPRI, 2002) notes that, as the programme expands to less poor areas, geographic targeting may no longer be viable and the relative benefit of household targeting will increase. Coady (2001) comes to similar conclusions in a study of *Progresa*. Furthermore, Skoufias et al. (2001) find also in the case of *Progresa* that geographic targeting itself in rural areas loses robustness as communities become less marginal.

Coady et al. (2004) provide a review of targeting experiences worldwide and find that work-fare programmes tend to perform best according to the indicator¹⁶ developed in the article, social funds perform worst, and cash transfer programmes include some of

14. See de la Brière and Lindert (2005) for an in-depth assessment of the targeting process in Brazil and Skoufias et al. (2001) for Mexico.

15. See IFPRI (2002) for the Nicaraguan RPS and Coady (2001) for *Progresa*.

16. The indicator used is the additional amount of resources received by the target group relative to there being no targeting.

the best and worst performers. The best performance outcomes are found for individual means tests, followed by characteristic (or categorical) targeting and then self-selection. However, there is extremely large variation in performance within each type of targeting method, including the proxy means tests popular in Latin America, leading the authors to conclude that the most important determinant of targeting success is the implementation capacity specific to the programme.

3.5 Verification and effectiveness

A key issue in a household targeting scheme is the means of verification and the role of house visits. Home visits are an integral part of the application of *Progresa* in rural areas, but are not carried out in Jamaica or Brazil. Of all CCT programmes, Brazil's *Bolsa Familia* and its predecessors seem to be the most susceptible to beneficiary manipulation and measurement error. Selection in the programme is based on unverified self-reported income, and questions about income are not well formulated in the *Cadastro Unico*, the information collection instrument. The Jamaican system is based on a proxy means test that entails over a dozen variables and is thus harder to manipulate. Individual proxy means tests are also used in Colombia through SISBEN.¹⁷

Castañeda et al. (2005), using the indicator developed in Coady et al. (2004), compare the performance of the targeting mechanisms adopted by CCTs in the region. All the programmes perform extremely well, even *Bolsa Familia* despite the problems in the application of the *Cadastro Unico* described above. The authors attribute this to a combination of regional quotas at the central level with effective geographic targeting at the municipality level where local knowledge about poverty is good. Research has shown that the different algorithms used in Latin America for proxy means testing do well at identifying the extremely poor, but are not good at excluding the non-poor, especially those near the poverty line; this deficiency clearly becomes important as the overall proportion of beneficiaries (poor) in the population gets smaller.¹⁸ These results suggest that the proxy means test itself is still a relatively blunt instrument, with the potential for high errors of inclusion; it certainly does not eliminate the need for a verification process such as an obligatory (or random) home visit.

3.6 Decentralisation

A final issue to consider is the degree of decentralisation in the targeting process. Note that targeting can be centralised even if actual programme administration is highly decentralised, and vice versa. In geographic targeting of the kind practised in PRAF II and RPS, community selection is done centrally, using national data based on a poverty

17. For a discussion in detail of the Brazilian system, see Castañeda et al. (2005) and de la Brière and Lindert (2005); for SISBEN in Colombia, see Castañeda (2005). Direct evidence on the degree of misreporting or manipulation by beneficiaries during the enrolment process is available from an evaluation of the urban expansion of *Oportunidades* in Mexico (Coady and Parker, 2004b), and in PATH (Mathematica Policy Research, 2004).

18. For Jamaica see Mathematica Policy Research (2004), for rural Mexico see Coady (2001), and for urban Mexico see Coady and Parker (2004b).

map or equivalent instrument. On the other hand, the Brazilian programme is highly decentralised, with local municipalities in charge of applying the *Cadastro Unico*, and with social control of monitoring exercised by a local committee.¹⁹

Community participation in beneficiary selection has been advocated on the grounds that local knowledge should be used to identify the poor better. Furthermore, local institutions should be better able to carry out this targeting because of fewer layers of bureaucracy and more accountability to the citizenry (de Janvry et al., 2005). Proponents of more centralised targeting structures argue that community participation can easily result in the elite capture of programmes, and a recent review by Mansuri and Rao (2004) claims that there is no clear evidence that community participation in targeting leads to better targeting outcomes. De Janvry et al. (2005) find significant variation in terms of the quality and impartiality of municipal-level administration of the *Cadastro Unico* in Brazil. If anything, the issue of centralised versus decentralised targeting is subject to the same observation made by Coady et al. (2004); there are good theoretical reasons for each approach, but ultimate success depends on actual implementation.

4 Monitoring and evaluation

An impressive effort has been made to set up monitoring systems and conduct independent evaluations of CCT programmes. The early success of the *Progresa* social experiment showed that rigorous impact evaluations are feasible in developing countries, and can make a difference in ensuring programme sustainability. The *Progresa* success spurred the development banks to demand strong evaluation components as part of their support for CCTs. Apart from evaluation, strong CCT monitoring systems are directly related to the need for verifying programme conditionality and adjusting transfers, while household-level targeting has also increased the need to build strong information systems to support successful execution that responds to programme objectives.

Progresa, RPS, PRAF II, PATH and *Familias en Acción* all employ a social experiment – namely, randomly selected control and treatment groups to measure changes in behaviour over time.²⁰ This strategy exploits the fact that CCTs usually expand in phases so that data can be collected on eligible communities before they are scheduled to enter the programme, thus serving as a legitimate counterfactual to measure impact. Note that, even though control groups all eventually receive benefits, and that this temporary exclusion can be considered part of the normal phasing in of a project, this carries political risks for the government. After being accused of deliberately withholding benefits from poor families to conduct the evaluation, programme managers in Mexico distributed benefits in control localities earlier than originally planned.

Table 3 reports some of the primary indicators or measures used in the evaluation of CCTs. Strictly speaking, there is a very limited set of indicators that one can use to measure the true impact as it relates to the stated objectives of these programmes. The

19. See the description in de Janvry et al. (2005).

20. RPS, *Progresa* and *Familias en Acción* had qualitative studies as well.

first objective is to ameliorate short-term poverty or food insecurity, which can be measured by caloric or food availability. However, the second objective, to improve human-capital development and thus break the inter-generational cycle of poverty, cannot be measured in the short run, although current nutritional status and cognitive achievement might be good current indicators of the potential for eventual human-capital accumulation and lifetime earnings.²¹

Table 3: Evaluation indicators and summary of significant impacts

	<i>Bolsa Escola</i>	<i>Familias</i>	<i>PRAF II</i>	<i>Progresa</i>	<i>RPS</i>
<i>Outcomes</i>					
School enrolment	✓*	✓		✓*	✓*
Preventive health check-ups		✓*	✓*	✓*	✓*
Vaccinations		✓*	✓*	✓*	✓
Pre-natal care			✓*		✓
<i>Impacts</i>					
Food availability		✓*		✓*	✓*
School achievement				✓	
Nutritional status (height)		✓	✓	✓*	✓*
Anaemia			✓	✓*	✓
<i>Indirect effects</i>					
Child labour	✓	✓		✓	✓
Women's status		✓		✓*	
Spillover				✓*	✓*
Investment spending				✓*	

Notes: ✓ indicates the indicator was evaluated; * indicates an unambiguous impact in the expected direction. In Colombia some impacts were found only among urban beneficiaries, or it is too soon to identify impacts – these do not classify as unambiguous. For Honduras the evaluation results have not been officially released, although health-related results were presented at a conference in 2003.

In terms of the short-run objective of food consumption, the results from PRAF II, RPS, *Familias en Acción* and *Progresa* have been very encouraging, with all evaluations showing a significant boost in either food purchases and/or caloric availability.²² This is a comforting result, given that governments have historically preferred in-kind (i.e. food) transfers to cash, for fear of the misuse of cash.

It is too soon to pass judgment on the ability of CCTs to accomplish their second objective. The evaluation work on human-capital investment has focused on outcomes such as school enrolment, health check-ups for growth monitoring and vaccinations. These have shown significant increases, although there are some nuances in the results

21. Early childhood nutrition has been shown to be an important determinant of later schooling outcomes, which in turn are important determinants of earnings and social mobility (Alderman et al., 2001; Glewwe et al., 2001).

22. See Hoddinott and Skoufias (2004) for *Progresa*; Maluccio and Flores (2005) for RPS; and Attanasio and Mesnard (2005) for Colombia.

on school enrolment which are discussed below. The degree to which these increased outcomes translate into later life impacts as intended by the programmes depends on factors outside the programmes themselves, such as the quality of supply-side services, access to higher levels of schooling and employment opportunities. This implies that CCTs by themselves cannot be expected to reduce inequality and overall levels of poverty; effort must continue to be applied to ensuring quality delivery of social services and an environment that fosters economic growth. One further complication is that, in the long term, increasing human capital in rural areas may foment national and international migration in search of employment opportunities, and thus lure past beneficiaries out of the scope of follow-up surveys.

One particular dimension of human-capital development, child nutritional status, is known to be an important predictor of later outcomes such as school attainment and achievement. Long-term nutritional status (height for age, or stunting) has been tracked in all four programmes that have been evaluated via social experiments. Both *Progresa* and RPS were successful in reducing stunting among the beneficiary population, but not PRAF II, while in Colombia preliminary results show reduced incidence of stunting for the youngest children.²³

School enrolment is the indicator that has received the most attention, and all programmes following this indicator have shown impressive increases. However, caution should be used in taking these results at face value. First, increased enrolment is probably no more than a measure of programme uptake, since enrolment is a condition for participation. Second, enrolment itself does not guarantee learning. Evaluation results for Brazil show that increased enrolment tends to come from children moving from work only to school and work, rather than leaving work altogether – a situation which does not encourage learning (Cardoso and Souza, 2003). Third, the one evaluation of cognitive achievement (*Progresa*) does not indicate any improvement in learning among beneficiaries relative to non-beneficiaries.

However, an encouraging result from the evaluations is the large increase in school transition rates among beneficiaries (from primary to middle school). In the case of RPS, there are also strong transition effects from 4th to 5th grade, even though children in the 5th grade are no longer eligible for programme benefits. Another interesting result is the larger impact on girls' schooling relative to that of boys in *Progresa*, particularly at older ages when the difference in transfer levels becomes quite large. Schultz (2004) estimated an internal rate of return of 8% for increase in enrolment and transition to junior secondary school brought on by *Progresa*.²⁴ Finally, the RPS results indicate larger impacts among the poorest beneficiaries in terms of school enrolment.

4.1 Indirect impacts

The large scale of financial resources moved by CCTs, as well as conditionality on behaviour, has the potential to influence other aspects of the household, community and

23. See Behrman and Hoddinott (2000) for *Progresa*; Maluccio and Flores (2005) for RPS; and Attanasio et al. (2005) for Colombia.

24. His estimates do not include social benefits related to increased schooling, implying that the societal rate of return may be even higher.

even region. Some of these ‘unintended’ consequences have been documented, and include changes in attitudes and intra-household decision-making (*Progresa*), demonstration or spillover effects on non-beneficiaries (Handa et al., 2001 for *Progresa*; Maluccio and Flores, 2005 for RPS), reduced international migration in the short term (Stecklov et al., 2005 for *Progresa*) and spending on productive activities that has the potential for generating multiplier effects on income (Davis et al., 2002 and Gertler et al., 2005 for *Progresa*). As mentioned earlier, Maluccio (2005) and de Janvry et al. (2006) find an important risk-coping role for RPS and *Progresa*, respectively, in times of crisis or shocks.

The impact on child labour is more ambiguous. While results from RPS (Maluccio and Flores, 2005) show that the percentage of working children aged 7 to 13 declined by 5.6 percentage points, results from *Bolsa Escola* (Cardoso and Souza, 2003) indicate that the overall reduction in the incidence of any child labour is small.²⁵ Results from *Progresa* are more encouraging, where it appears that, for boys at least, most of the increase in school enrolment comes from a reduction in work. For girls, the observed increase in schooling comes at the price of reduced leisure because girls’ work, primarily non-market, is more compatible with schooling (Skoufias and Parker, 2001). Similar results are found for *Familias en Acción* (Attanasio et al., 2006), where for both boys and girls increased time at school comes from reduced domestic work and leisure, with no effect on time spent on wage-earning activities.

4.2 What kind of an evaluation?

As new programmes are designed and implemented, the issue of whether and how to implement an impact evaluation needs to be addressed. In a general sense, there is always a need for accountability of programme design and use of funds, but evaluation, especially through social experiments, is costly and its objective and purpose should therefore be clearly defined at the outset. In Honduras and RPS, for example, social experiments were launched as part of pilot schemes to ensure effectiveness and inform subsequent expansion.²⁶ In Mexico, the evaluation helped the programme survive a regime change. The experiments in Colombia and Jamaica were not designed to inform the subsequent expansion of pilots, so it is assumed that their objective is to ensure accountability of programme design in order to protect future funding.

The existence of a rigorous impact evaluation can have an important effect on a programme’s reputation and perceived ‘seriousness’ of purpose. In Mexico, for example, the *Procampo* agricultural cash transfer programme is as large as rural *Progresa* but does not have the same reputation of technical rigour and transparency, mostly due to the latter’s external evaluation.²⁷ Given that new programmes are likely to be mounted with technical and financial support from development banks, impact

25. Another separate CCT programme in Brazil, the Child Labour Eradication Programme, or PETI, had the specific objective of reducing child labour. As in *Bolsa Familia*, children must attend school, but in addition must attend an after-school programme. A quasi-experimental design-impact evaluation found mixed results for the programme (Yap et al., 2002).

26. The fact that these are localised pilots raises concerns about the external validity of the evaluation results.

27. See the extended discussion in Davis (2003).

evaluations of some kind are likely to be on the cards, leading to the issue of the type of evaluation that should be considered and the indicators to be measured.

A key issue to be resolved is whether or not to design a social experiment. While experiments are the most technically defensible evaluation strategy, they are also the most costly. Results in Caldes et al. (2004) show that, while the external evaluation of *Progresa* was a mere 5% of total activity costs, it was 35% and 22% of these costs in PRAF II and RPS respectively. These large cost shares are due in part to the small size of the two programmes; the exceptionally high share in PRAF II is because of that programme's rather low implementation success. Clearly a social experiment will be more cost-effective the larger the programme,²⁸ but what are the benefits, especially given the existing state of knowledge on the success of the already established programmes? In particular, can cheaper, non-experimental methods deliver similarly robust estimates?

Recently one non-experimental method, propensity score matching (PSM), has become very popular in the evaluation literature, and has been proposed for the upcoming evaluation of *Bolsa Familia*. Diaz and Handa (2006) test whether PSM replicates the impact estimates of *Progresa*'s social experiment. They find that in fact PSM is capable of replicating the results for school enrolment and child labour, but not for food consumption which is measured differently in the national household survey relative to the *Progresa* data sets. They conclude that PSM may be a viable alternative to experiments in cases where good household surveys exist within the relevant time period, and when survey instruments are comparable.

Indicators such as health-care utilisation and school enrolment are better characterised as outcomes rather than impacts. For these types of variables, a monitoring system that tracks beneficiary compliance coupled with beneficiary household surveys could be compared with national changes in order to make inferences about programme effectiveness. Handa and Huerta (2004) have shown that the use of administrative data plus a good understanding of the beneficiary selection process can give managers a reasonable idea of programme impact. Beneficiary household surveys and information collected during programme enrolment could also be used to assess targeting efficiency.

4.3 Some unanswered questions

There are several key unanswered questions about CCTs that need to be considered for future evaluations. The first is whether CCTs can achieve their stated long-term objective of human-capital development and future poverty alleviation. This requires following the initial cohort of beneficiaries through school and into the labour market, an effort that is complicated and costly, particularly given national and international migration, and unlikely to be financed by governments (with the exception of Mexico). Given the international public-good nature of this information, there is a clear role for the development banks and other international development agencies (including bilateral aid agencies) to provide financial support.

28. Note that a social experiment is probably only feasible for a new programme where a true control group can be constructed.

Another unanswered question concerns the quality of schooling and the general role of supply-side factors in ensuring eventual programme success. Ideally, we would like to link programme participation with school enrolment, cognitive achievement and eventual labour market outcomes (earnings) in order to fully understand the full impact of CCTs. Increased enrolment (and attainment) may not lead to future poverty reduction if there is no actual learning, and while CCTs cannot necessarily be held accountable for learning outcomes, clearly the utility of investing in CCTs is seriously undermined if learning is not accomplished because of poor schooling quality.

5 Lessons from the Latin American experience

Within the short span of less than ten years, CCT programmes have become the social protection/social safety-net intervention of choice in Latin America, and are increasingly being looked at as an example to emulate in other parts of the developing world. In this article we have highlighted and brought up for discussion a number of the key policy issues and choices involved in the design and implementation of CCTs.

Despite reshaping the social protection paradigm in Latin America, a number of questions remain regarding the future direction of CCTs in the region. First, the political future of these programmes in the countries where they are currently being implemented is not assured. In Brazil and Mexico they have a high degree of political backing, having survived changes in presidential administration, translating into a very high probability of being sustained over the medium run. PATH in Jamaica is also likely to be sustained beyond its current World Bank loan, given its strong government support and the fact that it has replaced a set of previously long-standing welfare programmes.

Fiscal sustainability remains an issue in the poorest countries where CCTs have been implemented through loans. Colombia's programme is financed through IDB and World Bank loans, and the potential for sustainability is less clear. In Honduras, PRAF II will probably continue to be supported through soft loans from the IDB, which will only postpone the eventual decision to fund the programme permanently. Surprisingly, RPS, one of the better executed programmes with solid evidence of impact, is also at risk due to a lack of strong government support.

Second, it is not clear that the CCTs are the most cost-efficient or sustainable solution to the development problems facing low-income countries. The two main efficiency justifications for CCTs are the existence of direct costs of human-capital investment that are not affordable by credit-constrained households, and the social benefits of these investments. While conditionality may be justified exclusively on political-economy grounds as a way of obtaining public support for poverty alleviation, there is little evidence that CCTs are a more cost-effective way of improving human-capital outcomes and reducing inequities relative to supply-side interventions.

While many CCTs have been seen as a way of harnessing supply-side resources, this is very much a case of 'the tail wagging the dog'. Indeed, the biggest potential concern with regard to the implementation of CCTs is that their success in raising outcomes may make them appear able to solve completely the problem of inequities in human capital, thus diverting resources and/or attention away from essential investments in health and education which may be the only way to sustain the long-term investment in human resources required to reduce poverty. Furthermore, any long-term

commitment consistent with the human-capital development objective raises serious concerns about financing and sustainability, particularly in the HIPC countries.

Third, the contradiction between the dual objectives of short-term poverty alleviation and long-term human-capital development has led to internal contradictions within the programme. These contradictions are most evident in the targeting and exit rules for CCT programmes, namely, who should be included as beneficiaries, and when they can be considered to be graduates of the programme. These contradictions tend to lead to a bias in targeting against the elderly and families without young children, which would have to be compensated by specific safety-net programmes for these segments of the population. Furthermore, these contradictions may undermine the commitment to the cycle of human-capital accumulation in the exit rules.

Fourth, the exclusive focus on human-capital accumulation by the younger generation misses the broader context of poverty-alleviation programmes within rural development. This is exhibited on a number of different levels. First, CCTs in general miss the opportunity for maximising synergies with agricultural and non-agricultural productive activities at the household level, and conversely, the rural household's participation in certain types of economic activities may blunt programme impact. Second, ignoring the human-capital accumulation of parents (with the exception of health) and asset accumulation within their economic activities weakens the household-level sustainability of the transfers beyond the time when either the transfers have been terminated and/or the children have left home. Third, CCTs in most instances represent a substantial influx of financial resources into marginalised, and often isolated, communities. Little attention has been paid in terms of how to maximise their impact on local economic development.

Finally, given the fiscal, policy and institutional weight of CCTs in the public spending of governments throughout the region, the results from existing and pending evaluations should be used to derive estimates of the cost-effectiveness of CCTs. These estimates need to be compared with similar estimates from other, competing programmes in order to judge the usefulness of CCTs within the poverty-alleviation toolbox. More broadly, the large financial and institutional resources dedicated to the implementation of CCT programmes in Latin America, in rural areas in particular, have inevitably crowded out alternative rural development initiatives. The differential returns in terms of poverty and economic development also need to be compared across alternatives.

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